



PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference LW8095PC	FOR FURTHER ACTION see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. PCT/KR 2003/002707	International filing date (day/month/year) 11 December 2003 (11.12.2003)	(Earliest) Priority Date (day/month/year) 12 December 2002 (12.12.2002)
Applicant SAMSUNG ELECTRONICS CO LTD		

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 6 sheets.

It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
 - the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).
- b. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international search was carried out on the basis of the sequence listing:
 - contained in the international application in written form.
 - filed together with the international application in computer readable form.
 - furnished subsequently to this Authority in written form.
 - furnished subsequently to this Authority in computer readable form.
 - the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
 - the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

2. Certain claims were found unsearchable (See Box I).

3. Unity of invention is lacking (See Box II).

4. With regard to the title,

- the text is approved as submitted by the applicant.
- the text has been established by this Authority to read as follows:
Lamp

5. With regard to the abstract,

- the text is approved as submitted by the applicant.
- the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the drawings to be published with the abstract is Figure No.: 2

- as suggested by the applicant.
- because the applicant failed to suggest a figure.
- because this figure better characterizes the invention.

None of the figures.

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Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

I: Claims 1-11 embodying features of a discharge lamp
II: Backlight assembly and LCD device containing same embodying mainly structural features of said assembly, like container and conductor arrangements.

1. As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

4. No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

The additional search fees were accompanied by the applicant's protest.
 No protest accompanied the payment of additional search fees.

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Box III TEXT OF THE ABSTRACT (Continuation of item 5 of the first sheet)

In a lamp (100) capable of improving luminance and uniformity of the luminance, and generating a light for displaying an image has a preferably a rectangular tubular shape. a cross-section of the lamp has a major axis (W1) substantially parallel with the light incident surface and a minor axis (W2). Therefore, the lamp (100) supplies the light capable of improving luminance and uniformity of the luminance to decrease power consumption.

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CLASSIFICATION OF SUBJECT MATTER

IPC⁷: H01J 61/30 G02F1/13357

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC⁷: H01J, F21V G02F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

WPI PAJ EPODOC KIPRIS

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	JP 03 210750 A (TOSHIBA LIGHTING) 13 September 1991 (13.09.1991) <i>abstract, figures 1, 2.</i>	1-11
X	JP 08 110507 A (MATSUSHITA ELECTRONICS) 30 April 1996 (30.04.1996) <i>abstract, figure 4.</i>	1-11
X	JP 06 203796 A (CASIO COMPUTER) 22 July 1994 (22.07.1994) <i>abstract, figure 2.</i>	1-3
X	JP 08 185826 A (MATSUSHITA ELECTRIC) 16 July 1996 (16.07.1996) <i>abstract, figure 4.</i>	1-3
X	EP 0329226 A1 (PHILIPS) 23 August 1989 (23.08.1989) <i>figures 1, 3 with description.</i>	1-4

 Further documents are listed in the continuation of Box C. See patent family annex.

- * Special categories of cited documents:
- „A“ document defining the general state of the art which is not considered to be of particular relevance
- „E“ earlier application or patent but published on or after the international filing date
- „L“ document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- „O“ document referring to an oral disclosure, use, exhibition or other means
- „P“ document published prior to the international filing date but later than the priority date claimed

- „T“ later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- „X“ document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- „Y“ document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
- „&“ document member of the same patent family

Date of the actual completion of the international search
29 April 2004 (29.04.2004)Date of mailing of the international search report
14 October 2004 (14.10.2004)Name and mailing address of the ISA/AT
Austrian Patent Office
Dresdner Straße 87, A-1200 Vienna
Facsimile No. 1/53424/535Authorized officer
SCHLECHTER B.
Telephone No. 1/53424/448

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 20020141183 A1 (MOON) 3 October 2002 (03.10.2002) <i>figures 8 and 9 with description.</i>	12-27
X	US 6331064 B1 (NISHIYAMA) 18 December 2001 (18.12.2001) <i>figure 4 and description.</i>	12-27
X	KR 20020071355 A (KUMHO ELECTRIC) 12 September 2002 (12.09.2002) <i>abstract figures 1, 2 and 4 with description.</i>	12-27

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Information on patent family members

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Patent document cited in search report	Publication date	Patent family member(s)			Publication date
EP A 329226		KR B 9707291			1997-05-07
		US A 5070273			1991-12-03
		EP A 0329226			1989-08-23
		DE T 68926921T			1997-03-13
		DE D 68926921D			1996-09-19
		NL A 8800478			1989-09-18
JP A 3210750A 2		none			
JP A 6203796A 2		none			
JP A 8110507A 2		none			
JP A 8185826A 2		none			
KR A 20020071 355		none			
US A 20020141 183		none			
US B 6331064	2001-12-18	TW B 507093			2002-10-21
		KR A 2000035728			2000-06-26
		US A 2002027774			2002-03-07
		JP A 200162593			2000-06-16